PG&E's Summer 2005 Supply and Demand Outlook

March 21, 2005

CA ISO Northern California Area - Summer 2005 Peak Demand Forecast

- PG&E's control area forecast is comparable to the CEC's projections for the summer of 2005.
- PG&E's control area forecast includes PG&E bundled load, PG&E direct access load plus the loads of municipal utilities and irrigation districts served via PG&E's transmission system. This forecast excludes the SMUD control area.

PG&E Control Area Forecast compared to CEC Forecast			
2005 Summer Peak Load in MW			
	PG&E	CEC	Difference
1 in 2	21,428	21,289	139
1 in10	22,630	22,710	(80)

PG&E's Extreme Temperature Scenarios

- PG&E's peak load model is estimated using the past ten years (1994-2004) of monthly peak day data.
- PG&E uses 45 years of temperature data to derive its temperature statistics used for forecasting.
- For the 1 in 2 forecast, PG&E simulates the estimated model using the average highest temperature in each month, except for July/August where we simulate the model over the average highest temperature for the year.
- For the 1 in 10 scenario, the model is simulated over temperature statistics chosen to represent a level that would not likely be exceeded, on average, more than once in a ten year period.
- Because the 1 in 10 events are so rare, we really can only guess at what the temperature response function looks like at such extreme values.
- According to our temperature data there have only been two years in the period 1984-2004 that have had temperatures that were very near to or above the 1 in 10 level.

PG&E's Supply and Demand Outlook for Summer 2005

- PG&E will have sufficient resources to meet 115% of its expected customer peak demand for the summer months of 2005. The majority of the CA ISO northern California demand is PG&E's retail load.
- PG&E's owned and contracted resources are expected to be fully available. PG&E hydroelectric portfolio is currently forecasted to produce 100% of the average year energy generation, and 100% of the hydro capacity is expected to be available during peak electric demand periods.
- Proven demand side programs and expected energy efficiency programs are included in the portfolio.
- PG&E has contracted with Mirant Company for dispatch rights to units at Pittsburg and Contra Costa Power Plant (966 MW). Also, PG&E has filed for approval with the CPUC a contract with Duke Energy for 650 MW which were at risk for retirement. PG&E continues to be in active negotiations with merchant companies who own power plants that are at risk for retirement.
- PG&E currently does not have a CAISO local area reliability capacity beyond RMR.
- In collaboration with the CAISO, PG&E has been upgrading its transmission, such as Path15, and distribution facilities to enhance and improve overall electric system reliability.

CEC's Report "Summer 2005 Electricity Supply and Demand Outlook"

- PG&E appreciates the collaborative work done by the CEC, CPUC, and CAISO in this assessment.
- PG&E has provided its 2005 retail load and resource forecasts to the CEC and CPUC. We will continue to work with staff to provide such relevant information as needed.
- PG&E concurs with these agencies that the CA ISO northern California reserves are adequate under normal and hot temperature scenarios.
- The concerns that PG&E has regarding the report are:
  - The assumptions and methodology used to calculate the loads, resource availability and reserves margin should comport with the CPUC-adopted resource adequacy rules.
  - PG&E's is one of several load serving entities (LSEs) in the CA ISO northern California with loads and resources. In order for PG&E to comment, we need to know the assumptions being made specific to PG&E (on a confidential basis). For example, PG&E doesn't understand the statewide hydro deration of 2700 MW from dependable capacity. PG&E's share of hydro capacity should not be significantly derated during a dry hydro year as we have determined from resource adequacy analysis.
  - Proven demand response and expected energy efficiency savings should be counted in the loads and supply balance when calculating the reserve margin.

Forecasts Compared to Observed Summer Peak Demand

- PG&E developed its current forecast model after the 2001 “energy crisis” for use in transmission planning, distribution planning and procurement planning exercises.
- Over the past 3-years, the forecast model has performed remarkably well.

	PG&E System Forecast includes PG&E, Muni's and SMUD				
	Forecast MW	Observed MW	Observed Error	Temp Normalized Observed	Temp Normalized Error
2002	22,670	23,296	(626)	23,076	(406)
2003	23,489	23,115	374	23,635	(145)
2004	24,066	23,257	809	24,237	(171)

Pacific Gas and Electric Company